UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,535	10/20/2003	Kevin J. Powell	1689 . 0310001	2130

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EXAMINER
TRAIL, ALLYSON NEEL

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/688,535	POWELL ET AL.
	Examiner	Art Unit	
	Allyson N. Trail	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 August 2006_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-23_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2,4-6,12,13,16,17 and 19-23_ is/are rejected.

7)☒ Claim(s) _3, 7-11, 15, and 18_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _20 October 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _8-2006, 10-2006_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Amendment

1.   Receipt is acknowledged of the Amendment and the Request for Continued

Examination filed August 17, 2006.

Claim Objections

2.   Claims 13 and 19 are objected to because of the following informalities:

Re claim 13, line 4: replace "the reader" with --a reader--.

Re claim 13, lines 4-5: replace "the operating state" with --an operating state--.

Re claim 13, line 7: replace "the first logical value" with --a first logical value--.

Re claim 13, line 9: replace "the dormant state" with --a dormant state--.

Re claim 19, line 1: replace "its" with --the--

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-6, 12, 13, 16, 17, 19, 22, and 23 are rejected under 35

U.S.C. 102(b) as being anticipated by Walter et al (5,856,788), hereinafter Walter.

With respect to claims 1 and 12, Walter teaches in column 1 lines 6-23 a method

in an RFID tag for minimizing unintended re-negotiation of the tag. Column 2, lines 16-

19 discloses including a confirmed read flag indicating whether the tag has been

previously read (isolated).

Figure 2 illustrates the methodology employed in the reader. The below steps

are also disclosed in the abstract.

(a) Step 18, receiving a symbol from a reader when the operating state of the tag

is in a first state (awake).

(b) if the received symbol has a first logical value (first bit), transitioning the

operating state to a second state (either deactivating the tag or responding to the bit)

(c) if the received symbol has a second logical value (second bit)

(1) evaluating the confirmed read flag

(2) if the read flag indicates that the tag has been read, transitioning the

operating state to dormant state (sleep).

(3) if the is no read flag, transitioning the operating state to the second

state (either deactivating the tag or responding to the bit).

With respect to claim 2, Walter teaches in the abstract if the received symbol has

a third logical value, performing the steps of: clearing the value of the confirmed read

flag and transitioning the operating state to the second state (either deactivating the tag

or responding to the bit).

With respect to claims 4 and 13, Walter teaches in figure 2, negotiating a

complete tag identification number with the reader when the operating state is a tree

traversal state. Specifically Walter discloses in the abstract, "a method and apparatus

for determining the identification number or any other information within a plurality of

radiofrequency identification tags within a common field of interrogation utilizes a combination of an isolation state into which the tags may be placed together with bitwise interrogation of the identification number or information followed by selective deactivation. A first bit in the identification number or information is interrogated of all the tags in the field. If any tag responds that the bit is a 1, a 1 is entered into an ID register in a reader and all tags in which a 0 exists in that bit position are deactivated. The process continues until only one tag remains activated. The last activated tag at this point has been completely read and is then placed in an isolated state. The process is begun anew with the remaining non-isolated tags until all tags have been read."

Walter teaches (b) receiving a symbol from the reader. (c) if the symbol has a first logical value (first bit) setting the confirmed read flag to indicate that the tag has been read (isolating the tag), and (d) transitioning the operating state to the dormant state (sleep).

With respect to claims 5 and 6, Walter teaches in the abstract determining the ID number of an RFID tag by interrogating the plurality of tags with a first bit or logical value. The processes is continued with a second, third, etc logical value until the ID number is determined. The logical values will include both a "0" value and a "1" value.

With respect to claim 16, see Walter teachings above. Additionally Walter discloses in column 2, lines 30-35 that both the reader and tags include radiofrequency transceivers, memories and programmable or custom logic circuitry for receiving, responding and implementing the commands and operations of the method described

above. Therefore, it is clear that the tag itself may include a memory for storing the

"isolated" (confirmed read flag).

With respect to claims 17 and 19, Walter teaches a means for resetting the

confirmed read flag in response to a symbol received from the reader when the RFID

tag is in a first operating state. (See col. 8, lines 3-5)

With respect to claim 22 Walter teaches in the abstract determining whether an

interrogation of all the tags in the population of tags is required or whether an

interrogation of only unread tags is required - if it is determined that all tags are to be

interrogated, transmitting a first symbol to the population of tags, and if it is determined

that only unread tags are to be interrogated transmitting a second symbol to the

population of tags.

With respect to claim 23, Walter also teaches negotiating a complete

identification number with a first tag in the population of tags in the abstract. At least

one symbol is transmitted causing the first tag to enter a first operating state (either

deactivating the tag or responding to the bit), and transmitting at least one symbol to

cause the first tag to set a confirmed read flag and enter a dormant (sleep) state.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Hamel et al (2004/0113790), hereinafter Hamel.

Walter's teachings are disclosed above. Walter however fails to teach the means for storing including a capacitor.

Hamel discloses in paragraph 0111, that the transponder 48c includes a storage capacitor 220.

In view of Hamel's teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Walter's RFID tag using Hamel's storage capacitor. Although Walter fails to specifically teach the means for storage, it is well known in the art to use a capacitor for storage. Capacitors are basic means of storage and therefore one would be motivated to use a capacitor.

6.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Ramamurthy et al (2005/0104719), hereinafter Ramamurthy.

Walter's teachings are disclosed above. Walter however fails to teach the means for storing including a digital storage device.

Ramamurthy discloses in paragraph 0004, that an RFID transponder generally includes a semiconductor memory in which digital information may be stored, such as an electrically erasable, programmable read-only memory (EEPROMs) or similar electronic memory device.

In view of Ramamurthy's teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Walter's RFID tag using Ramamurthy's digital storage devicer. Although Walter fails to specifically teach the

means for storage, it is well known in the art to use digital storage. Digital storage devices are basic means of storage and therefore one would be motivated to use such a storage device.

Allowable Subject Matter

7.   Claims 3, 7-11, 14, 15, and 18 are objected to as being dependent upon a rejected base claim and also objected to above (claim 19), but would be allowable if rewritten in independent form and overcoming the above objection, including all of the limitations of the base claim and any intervening claims.

The following is an examiner's for allowance: Although Walters teaches a method in an RFID tag device for minimizing unintended re-negotiation of the tag device, wherein the tag includes a confirmed read flag indicating whether the tag has been previously read, the above identified prior art of record, taken alone, or in combination with any other prior art, fails to teach or fairly suggest the specific features of claims 3, 7-11, 14, 15, and 18 of the present claimed invention. Prior art fails to teach the above method including the step of if the received symbol has a forth logical value, transitioning the operating state to a third state. Prior art additionally fails to teach wherein the first state is a calibration state and the second state is a global mode set state, and lastly, wherein the fourth state is a tree traversal state. Lastly, prior art fails to teach if the received symbol has a third logical value, transitioning the operating state to a tree start state. Moreover, one of ordinary skill in the art would not have been motivated to come to the claimed invention.

Response to Arguments

8.   Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection. Walter's teachings above meet the claimed limitations of claims 1, 2, 4-6, 12, 13, 16, 17, and 19-23. Claims 3, 7-11, 14, 15, and 18 are indicated to include allowable subject matter.

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Allyson N. Trail* whose telephone number is (571) 272-2406. The examiner can normally be reached between the hours of 7:30AM to 4:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571) 272-2398. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**allyson.trail@uspto.gov**].
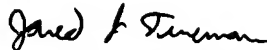
All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published

in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG

89.

Allyson N. Trail
Patent Examiner
Art Unit 2876
October 26, 2006

JARED J. FUREMAN
PRIMARY EXAMINER